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Discussion of
"PHILADELPHIA CAPITAL BUDGET AND PROGRAM PROCEDURES"

by Charles A. Howland
(Proc. Sep. 508)

ALFRED R. GOLZE,¹ M. ASCE.—This paper by Charles A. Howland, A.M. ASCE, describing "Philadelphia Capital Budget and Program Procedures," is of considerable interest to the writer. As a former employee of the City of Philadelphia and of the U. S. Bureau of the Budget, and since 1947 responsible for all budget and program procedures of the Bureau of Reclamation of the Department of the Interior, the writer has been interested for many years in developing sound and practical procedures for planning, scheduling, and financing the construction and operation and maintenance of public works. Civil Engineering, in June 1948, published the writer's article "Bureau of Reclamation Procedures Control All Phases of Heavy Construction Program," wherein techniques were outlined having some similarity to those described by Mr. Howland. Some of the experiences of the Bureau of Reclamation may be of interest to Mr. Howland and his associates.

Although, there is no formal definition of what is meant by the Capital Budget required by Philadelphia's City Charter, page 2 of the paper states it includes all permanent and physical improvements as initially constructed, costs of preliminary surveys and studies, and purchase of equipment. The Bureau of Reclamation also includes in its equivalent capital budget the cost of operating completed facilities during test periods before they are turned over to the operating agent. In Philadelphia, presumably newly completed public works such as water systems or rapid transit extensions must likewise go through a testing period. Mr. Howland does not mention whether such costs are part of the capital or operating budget. Perhaps they are too small to be a problem, but it would be of interest to know how they are treated for budget purposes.

Mr. Howland does explain that the maintenance of improvements is excluded from the capital budget. For projects or facilities which are completed and in service it is usually more convenient to finance not only routine maintenance but also alterations or betterments of a facility as part of the operating budget. If the Philadelphia City government has an accounting system which distinguishes between plant investment (capital costs) and maintenance costs, irrespective of source of funds, the program treatment and actual financing of the proposed work should be greatly simplified. In other words, it would not be necessary to go through the entire capital budget reviewing process to justify expenditures necessary to keep a completed facility in good operating condition even though the expenditure would increase the capital investment of the City in the facility.

The development of public works programs that show the work proposed

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by the City, based on funds from all sources, is an excellent procedure. Too often in the past difficulty in planning and controlling expenditures for public works arose from divided programs tied to divided financing. The most serious internal problem reported by Mr. Howland on pages 1 and 2 of his paper would appear to be the limitation on availability of appropriated public works funds to the current year and the first six months of the following year. He does not state whether this refers to availability for obligation or expenditure or for both. Perhaps in Philadelphia's budget procedures such treatment of fund status is not made.

In the Federal Government most agencies are required to make a distinction between "obligations" and "expenditures" when preparing programs and budgets. An "obligation" is a legal reservation of funds to service a commitment such as a construction contract or a month's pay roll. An "expenditure" is created when work is done or services are performed. Obligations may be limited to the fiscal year of appropriation or may be indefinite for completion of the work for which appropriated, dependent on Congressional instructions in the appropriation bills.

The Bureau of Reclamation early encountered the problem of financing large scale public works requiring more than one construction year to build. Many construction contracts awarded for dams, power plants, transmission lines and important irrigation systems, extend over two to five years. Congress has authorized the Bureau of Reclamation by a special Act, to execute construction contracts running beyond a fiscal year, subject to appropriations by the Congress. Congress has also authorized the Bureau to merge all unused construction funds at the end of one fiscal year with new funds appropriated for construction, with no time limitation on obligation or expenditure. These two authorities have made possible the Bureau's success in maintaining important construction programs on reasonable schedule, although budgetary considerations have at times required some slowing down of construction work. If similar authority could be made available to the city officials in charge of prosecuting construction of public works, it should simplify both the programing and financing of such works.

One of the principal problems in the Federal Government has been to move proposed public works from a planning stage to a construction stage (leaving out fiscal considerations). Considerable time and effort are involved in the process. After a proposed project has been investigated, found economically desirable, and approved by the agencies concerned, including the Bureau of the Budget, the plans must be submitted to the Congress to be considered by its Legislative Committees which are separate and distinct from the Appropriations Committees. Eventually, a law may be passed authorizing the work to be done under various conditions applied by the Congress. The views of the sponsoring Federal agencies, those of non-Federal agencies and the general public concerned with the improvement are secured during the legislative process. After a law is passed authorizing a project it may then be included in the annual construction budget for submission, but not until then.

From Mr. Howland's article it would appear that the several departments of the Philadelphia City government have authority to include in the capital budget, on their own initiative, those new proposals which have passed the planning stage and which they consider ready for construction. A specific authorization to proceed with construction by the City Council, prior to inclusion in the capital budget, is not required. As a consequence, the review given the capital budget by the Philadelphia City organizations and citizen groups, is a joint review in the sense that it not only considers the funds involved in financing work underway and proposed but it also makes decisions on the

start of new projects. In other words, it combines into one action the separate legislative and appropriation processes found in the Federal Government procedure. If it can be assumed that proposals for initiation of new public works are the primary items of interest in the review of the capital budget, then some increase in budgetary efficiency might be expected if the authorization phase was handled as a separate process.

Mr. Howland does not mention in his paper the amount of time required to go through the entire procedure each year, although he does identify certain statutory deadlines that have to be met. It would be interesting to know the amount of time required for processing the capital budget from the initial departmental proposals through to its final consideration and adoption by the City Council and approval by the Mayor. It would also be interesting to know the approximate cost and number of employees who are required to spend a substantial part of their time in preparing and processing the capital budget with its related statements, tabulations, and other documents. The average dollar value of the annual capital budget would not be an important consideration in measuring cost of preparation. The Bureau of Reclamation has found that fluctuations as high as 50 per cent in total dollars in the budget still require the same number of employees to process the paper supporting it.

The authority of Philadelphia's Director of Finance to make adjustments of not more than the 10 per cent in the appropriation available to a particular project should be a valuable aid. There have been times when progress of construction work in the Federal Government has been hampered by lack of authority to make such adjustments without specific approval of the Congress.

In his discussion of financial policies on page 3, Mr. Howland refers several times to costs and expenditures. It is not clear whether, as far as Philadelphia is concerned, they are synonymous. In the Bureau of Reclamation and in the Federal construction agencies, all programs are developed on a cost basis. This is actually an "applied cost" representing the value of the work in place, including all services, installed equipment, materials withdrawn from warehouses, property which may be transferred from projects as well as direct expenditures, all of which add up to the cost in place or the investment cost of a structure. Subtracting from the total cost figure, the value of transfers, credits, depreciation of equipment and service facilities, an expenditure figure is obtained which represents the cash expenditure against available funds needed to finance the project for the fiscal year concerned. This figure is in turn adjusted to obligations by subtracting the unliquidated obligations at the beginning of the fiscal year. This is necessary because Congress controls the programs and makes its appropriations on an obligation basis. It would be somewhat simpler if the programs and appropriations were on an approved expenditure basis or a cash expenditure basis. It would be helpful to know exactly how the Philadelphia public works program is controlled; whether it is on an "applied cost," "accrued or cash expenditure" basis.

In order to make the program procedures in the Bureau of Reclamation function properly, it was necessary to revise its accounting system materially, which was accomplished some five years ago. The accounts, in addition to developing the investment of the United States in Reclamation, are required to develop costs in the same manner and with the same breakdown as carried in the program and budget detail. In that way, it is possible for the reviewing authorities to have actual costs of work completed that ties directly in with the budget submissions. It further supplies a control of funds against over-obligation and a basis for reporting progress as the work proceeds. A good

accounting system is an integral part of a sound public works budget and program procedure.

Mr. Howland's paper is evidence that the new City Charter of Philadelphia has made possible material improvements in scheduling and financing municipal public works. It is to be expected that further improvements will come as experience develops the need for modifications.

Discussion of
"HISTORY OF THE CITY PLANNING DIVISION OF THE ASCE"

by Harry W. Alexander
(Proc. Sep. 509)

GEORGE H. HERROLD,¹ M. ASCE.—The writer has read with interest the History of the City Planning Division of the ASCE by Harry W. Alexander, member ASCE, Separate No. 509. History, the writer believes, is a record of what people do, or think, or hope, or feel or aspire to. In this case it is a record of the thoughts of Engineers in developing the fundamentals of the Art and Science of City Planning. Thoughts expressed in terms of an Engineer's own experience that he can think them through and understand the meaning. The writer therefore ventures to call attention to some of the thoughts on this subject by members and others before this Division not mentioned in this short history. Thoughts, that the writer believes to have had great influence.

First the writer would refer to the City Planning Technical Papers presented at the annual meetings of the Society, January 19, 1923. Probably the first meeting at which City Planning was recognized as a function of Engineering. And which probably spearheaded the formation of the Technical Division of City Planning the same year (Paper No. 1526, Transactions, 1923) "Regional Planning," by Nelson P. Lewis: "The Engineer and City Planning," by George H. Norton: "Park and Parkways," by Lynn White and, "Zoning—It's Progress and Application," by Morris Knowles, all members ASCE and men who have "arrived," in the estimation of their contemporaries. Where will one find a more thorough guidance in the field of Regional Planning on which to expand the Regional idea?

The writer will only refer to one of the other papers, all worthy of review, that of Morris Knowles. His observations on "What Zoning Does Not Do" and "What Zoning Will Accomplish" is as true as any presented in subsequent years as a fundamental to build on and the entire paper is of a clarity not usual in many papers on this subject. Mr. Alexander speaks of the two symposiums "Factors in Zoning Cities" and the influence of zoning on "The Design of Public Utilities" held at the Detroit meeting of the ASCE. (Papers 1563 and 1564, Transactions, 1925). Surely that excellent fundamental "Zoning and Health" by George C. Whippe, member ASCE, and "House Density" by Robert Whitten, Esq. should have special mention and the paper by Paul Hansen, member ASCE, on the "Design of Drainage and Sewerage Systems" should not be passed by. Quoting Hansen's closing remark "from any aspect the Engineer who is concerned with sewerage and drainage can only welcome the wider adoption of zoning ordinances; they mean better sewerage for less money." It is notorious that the Engineers of Private Utility Companies,—Bus, Streetcar, Gas, Electric Power, Telephone and Water Departments have made far greater use of Zoning than many City Engineers have.

1. St. Paul, Minn.

Then there is the Paper (No. 1564) by T. Glenn Phillips, Esq. Consultant for the Detroit Planning Commission, on "The Influence of Zoning on the Design of the Street System." This plan, at the time seemed far-fetched, so to speak, but not today with Traffic Engineers trying to find a way to limit traffic to the capacity of the street. It is a paper that should be reread. The Historian has referred to the Paper (No. 1556, Transactions) by Arthur S. Tuttle on "Increasing the Capacity of Existing Streets." This is a constructive Paper but one of the discussers, Mr. C. E. Grunsky, past president ASCE and sometime chairman of the City Planning Division, presents an interesting financing plan. Mr. Tuttle in his closing remarks gives considerable thought to Mr. Grunsky's proposal and cites it as "common sense procedure." It is a paper that should be reread today. And finally (Paper No. 1684, Transactions, 1928) "The Regional Community of the Future" by Thomas Adams. The excellent papers of the discussion, especially that of Wm. J. Wilgus and Morris Knowles, members ASCE, should have special mention.

By these words, the Engineering precepts of City Planning have been expressed and they should be confirmed in the History of the City Planning Movement. After all, City Planning is Municipal Engineering to which something has been added; and, so conceived, is much more likely to be accepted in our free enterprise system. The writer was pleased to find his name among those mentioned. He initiated the idea of a manual on underground utilities and with the approval of his very fine executive committee, selected the members of the committee who could write such a manual. The writer appointed Rolland S. Wallis as chairman of the committee on a Land Sub-division manual. He was a long time in getting started, but the results were excellent. The writer sponsored the thoroughfare's committee report so ably handled by W. W. Crosby (not Crossly). The committee on "Equitable Zoning of Assessments for City Planning Projects" never completed their report, although several excellent papers on the subject were read at regional meetings and were published in Civil Engineering at the time (April 1933). The committee work just died out. The writer has a copy of the manuscript they worked on, should the subject be revived.

Discussion of
"IS PARKING A PUBLIC RESPONSIBILITY?"

by William R. B. Froehlich
(Proc. Sep. 510)

GEORGE H. HERROLD,* M. ASCE.—The question of responsibility in providing parking is largely a matter of leadership in each community—i.e. what group decides things.

If the City Council is a strong group of high calibre they will withstand the pressure of other groups and decline to tax people to pay for Parking facilities—making those who walk or, ride the buses or street cars pay for parking of those automobiles that compete with mass transportation.

If the merchants association is the stronger group and have real leadership they will induce the city council to provide public parking facilities. There are of course storekeepers who know where their business comes from. That the greatest number of purchases are made by those who work down town and those who use mass transportation. While the dollar volume probably comes from those who prefer to use their own car as a means of transportation.

In metropolitan districts, with strong rivalry between cities—Oakland and San Francisco as an example—also St. Paul and Minneapolis—the merchants quickly take the initiative and provide through private capital the parking facilities they think are needed. There are of course others.

While we are living in a democracy where a person has a free choice of how he travels, he should try to be intelligently selfish. Democracy is the finest political philosophy known and free enterprise a great system, but selfishness may be a greater menace than we think. Large aggregations of people cannot live together comfortably without some regulations. As examples, we have building codes to prevent chiseling in the construction of buildings—housing codes to compel owners of rental property to keep them in livable condition and prevent their becoming slums—and many other necessary rules of conduct. We do not allow the over-loading of public buildings. When the capacity of an auditorium is reached, no more people may enter. We accept such regulations as reasonable.

The time is rapidly approaching when we will say that when the capacity of a street is reached no more cars may enter, otherwise it will impede the free movement of necessary vehicles—such as delivery trucks, buses, taxi cabs, street cars, etc. It will lessen the demand for abutting buildings for business purposes. It will reduce the volume of business and rentals. It will encourage de-centralization and injure the tax structure.

How may this be done? A police department backed by a city council can lay out what may be called a congested or overloaded district and in this district prohibit all vehicles from entering between the hours of 10 A.M. and 4 P.M. except public or utility emergency vehicles—buses, street cars, taxi cabs, trucks making merchandise deliveries to stores in the district, bicycles

* St. Paul, Minn.

carrying Western Union boys etc. If there is a parking lot or garage in this district cars may leave during this time period. If there is a hospital or medical building in the district special permits would be issued. Such regulations would be designed for each district.

I think it unnecessary to worry about private capital building a ramp garage or parking lot in a wrong location. A City Council might do this to favor some constituent who has property to sell but not a business-men's group. Parking authorities are a good thing as all authorities are, as a rule. They are one of the steps in the evolution now taking place. They are by their very nature required to make a scientific approach to the problem. A different approach than may be used by a city council.

NATHAN CHERNIACK,** M. ASCE.—In the paper by William R. B. Froehlich entitled "Is Parking a Public Responsibility?," the author has brought together in a few pages the highlights of the parking problem in cities throughout our nation. But what is the answer to the question posed by the author? He says, "There is no absolute carefully delineated answer to the question of public versus private management of parking facilities." He does, however, indicate that "As for the question of responsibility, it would be difficult to deny that the public does have a certain responsibility—to see that adequate spaces are supplied in the business districts sufficient to satisfy a good part of the demand."

As far as the present inadequacy of offstreet parking in cities is concerned, the writer would agree with the author that the public does have a responsibility to exert every effort to make up present deficiencies, because of its passivity in the past, with respect to the parking problem. On the other hand, when it comes to future additions to the parking demand, that, in the writer's opinion, should definitely be the sole concern of private enterprise.

It seems to the writer that the simplest way to stop the worsening of the city parking problem and at the same time to get private enterprise started on the road to provide adequate offstreet parking space in new "traffic generators," is for municipalities throughout the nation to utilize the zoning ordinance requiring "traffic generators"—new or substantially reconstructed buildings—to provide offstreet parking facilities consistent with the movement of vehicles they are bound to attract. In the future, cities throughout the nation, once and for all, should refuse to permit new buildings to throw their newly created parking loads onto city streets and continually worsen the city parking problem.

The zoning ordinance is a well-tried, simple regular legal procedure that requires neither complicated state or enabling legislation, nor intricate financial involvements on the part of the municipality or any of its agencies charged with providing offstreet parking spaces. The zoning ordinance is legally feasible, being founded on the well-recognized police power of the city to protect the safety, health and welfare of its citizens.

The zoning ordinance is a direct attack on and goes effectively to the very heart of the parking problem. It permits no new or substantially reconstructed buildings to worsen the parking problem through its failure to provide offstreet parking for the traffic it is bound to generate. The ordinance goes directly to the core of the problem by specifying the number of offstreet parking spaces that must be provided by each type of traffic generator, tailored to the size of the city and the type of mass transportation it has available.

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The zoning ordinance is an increasingly popular method of attacking the parking problem. According to Highway Research Bulletin No 24 entitled, "Zoning for Parking Facilities" prepared by Dr. David R. Levin, there were in 1950, some 185 localities in 29 states and the District of Columbia which have adopted zoning ordinances requiring the provision of offstreet parking facilities in connection with various property uses. By 1954, according to Dr. Levin, 80 additional localities (cities, towns, villages, townships and counties), will have adopted similar ordinances, bringing the total to 265 localities in 33 states and the District of Columbia.

Above all, the zoning ordinance, the writer believes, is an economically sound approach toward meeting the parking problem resulting from the construction of new traffic generators, because it places the responsibility for providing offstreet parking facilities upon those who have a vital interest in them and who can also best satisfy the peculiar characteristics of the economics of parking facilities.

The economics of offstreet parking does possess some peculiar characteristics. The greatest parking demand usually occurs in areas where land is high priced. The storage of cars is of very low value land use. There is a definite limit to the parking fee that parkers are willing to pay. A parking fee high enough to cover debt service charges and operating expenses will usually price parking facilities out of substantial use. A reasonably low parking fee will usually not cover all debt service charges and operating expenses. In short, parking facilities are usually marginal projects involving considerable risk of deficits. This peculiar economics of offstreet parking facilities accounts for the fact that experienced parking lot and garage operators have not rushed in to supply cities with all the parking space for which there is a present demand, and as a consequence has lifted some parking fees in some areas to monopoly prices. This also accounts for the fact that business generally is willing to "pass the buck" to city governments and its agencies to provide offstreet parking spaces.

On the other hand, although there is a limit to the fee that parkers are willing to pay, a substantial segment of potential parkers would make additional contributions in the form of profits on purchases or premiums on rentals of office space with convenient parking for themselves as tenants, and would even pay extra parking rentals for their clients, customers, and for some of their employees. There is, therefore, a large segment of the local economy of every city for whom parking facilities could be provided on an economically practicable basis but only by those who are planning new traffic generators, and who have a vital interest in protecting their investments from obsolescence. In fact, there are those who are now convinced of the business-inducing value of properly designed offstreet parking facilities in connection with new buildings. These businessmen appreciate that the comfort and convenience of offstreet parking facilities within close proximity of their buildings would attract more shoppers¹ more often, and would keep commercial occupancies high and at premium rentals even in a receding business cycle.

1. The latest indication of the consuming public's appreciation of offstreet parking facilities is the new 550-car garage opened by Zions Cooperative Mercantile Institution of Salt Lake City, Utah. This \$550,000 garage constructed over its delivery zone and warehouse has increased sales so dramatically that this store is considering a 200-car addition. - "Time," December 6, 1954, Page 106.

Businessmen are also becoming more and more aware that a substantial segment of the population and the purchasing power it represents is quite willing and able to cover all debt service charges and operating expenses in connection with offstreet parking facilities, provided all of the contributions of parkers were integrated. The zoning ordinance would force all realty developers, merchandisers, and businessmen to determine the areas of economic practicability of offstreet parking facilities. They would integrate parking fees, with percentage of profits, premiums on rentals, etc., so as to cover all charges in connection with offstreet parking facilities required in new buildings, by zoning ordinances. Businesses could then control and limit parking spaces to those who were willing and could afford to make the necessary contributions to cover all expenses of parking facilities. In this way, new parking demands that would be induced would be only of a type that would be willing to "pay the freight;" none would be induced of the type that was willing to pay only subsidized parking fees.

Downtown areas of our cities still have tremendous potentialities for business expansion, if in their gradual rebuilding, sufficient elbow room were provided in new buildings to accommodate offstreet, the autos and trucks they would attract in peak periods. Zoning ordinances would exert a positive influence in inducing a gradual replanning of our cities. Under zoning ordinances, downtown areas would have to be gradually rebuilt so that eventually a proper balance, transportationwise, would result between (a) building bulk which generates moving and standing vehicles, (b) expressway capacities which would handle large volumes of moving vehicles, and (c) offstreet terminal facilities for standing vehicles, close to and integrated with important downtown destinations and traffic generators. Thus, under zoning ordinances, city downtown areas would eventually be rebuilt so as to meet, adequately, the needs of the motor age.